



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,706	11/05/2003	Linda Van Patten Benhase	TUC920030059US1	7080
46263	7590	10/17/2006	EXAMINER	
SCULLY, SCOTT, MURPHY, & PRESSER			CHEN, TE Y	
400 GARDEN CITY PL				
GARDEN CITY, NY 11530			ART UNIT	PAPER NUMBER
			2161	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/701,706	BENHASE ET AL.	
	Examiner	Art Unit	
	Susan Y. Chen	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 07 August 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-19 is/are rejected.
- 7) Claim(s) 20 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some,* c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

This office action is in response to the amendment filed on August 07, 2006.

Claims 1-20 are pending for examination, claims 1, 8 and 14 have been amended; claim 20 has been newly added.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Publication No. 2004/0123,180 issued to Soejima et al. (hereinafter referred as Soejima), in view of U.S. Publication No. 2004/0088379 issued to Aoshima et al. (hereinafter referred as Aoshima).

Claim 1:

Soejima discloses method for pairing source and target volumes for the purpose of copying data from the source volume to the target volume [e.g., P2, Sections: 0034 – P. 3, 0040], comprising the steps:

graphically depicting representations of storage resources in a single view [e.g., Fig. 22 and associated texts];

selecting a pair of said storage resources including identifying one of said pair as the source volume from which data are to be copied, and identifying the other of said pair as the target volume to which the data are to be copied. [e.g., P. 10, Sections: 0147-0150, Fig. 22 & P. 16, Sections: 0227-0242, Fig(s). 25-28 and associated texts]; and

after said pair have been selected implementing checks to determine if said selected pair satisfy predefined rules [e.g., the storage configuration modification processing at Fig(s). 18-19 and associated texts, Sections: 0162- 0172].

sending alert messages regarding the selected pair if the selected pair do not satisfy the predefined rules [e.g., Section: 0170].

Soejima does not specifically disclose that the selection of the pair of storage resources is on a single view.

However, Aoshima discloses the selection of the pair of storage resources is being performed in a single view [e.g., Abstract, Fig.(s) 4-9 and associated texts].

Soejima and Aoshima are both of the same endeavor for facilitating the copying of data from source volume to the target volume via graphic user interface, therefore, with the teachings of Soejima and Aoshima in front of him/her, an ordinary skilled person in the art at the time the invention was made would be motivated to modify Soejima's screen with the single view window as taught by Aoshima for making the selection of the pair of storage resources, because by doing so the system will be

upgraded with a more user friendly GUI to facilitate the copying of data from source volume to the target volume.

Claim 2:

Except the limitations recited in claim 1, the combined system of Soejima and Aoshima further discloses graphical depictions are side-by-side depictions in the single view of a logical configuration of the storage resources [e.g., Fig. 25 and associated texts].

Claim 4:

Except the limitations recited in claim 1, the combined system of Soejima and Aoshima discloses that the storage resources include a source subsystem having a multitude of source storage volumes, and a target subsystem having a multitude of target storage volumes; and each of the pairs consists of one of the source storage volumes and one of the target storage volumes [e.g., Soejima: the units: 28050, 28100, Fig. 28].

Claim 5:

Except the limitations recited in claim 4, the combined system of Soejima and Aoshima discloses that the selecting step includes the steps of: selecting a number of source storage volumes; and selecting a number of target storage volumes; and wherein one of the checks ensures that the number of selected source storage volumes

is equal to the number of selected target storage volumes [e.g., Soejima: P. 2, Sections: 0034-0039 & Fig. 5].

Claim 6:

Except the limitations recited in claim 5, the combined system of Soejima and Aoshima discloses the following:

the step of selecting a number of source storage volumes includes the step of identifying a set of source storage volumes [e.g., Soejima: unit 19050, Fig. 19];

the step of selecting a number of target storage volumes includes the step of identifying a set of target storage volumes [e.g., Soejima: unit 19060, Fig. 19]; and

the implementing step includes the step of, if the number of source storage volumes in the set thereof is not equal to the number of target storage devices in the set thereof, then displaying a message for indicating that the sets have unequal numbers of storage devices [e.g., Soejima: units: 19070-19160, Fig. 19].

Claim 7:

Except the limitations recited in claim 1, the combined system of Soejima and Aoshima discloses the implementing step includes the step of also implementing error handling based on the predefined rules [e.g., Soejima: P. 11, Section: 0169-0170].

Claim 8:

This claim recites similar subject matters as claim 1 in form of system means, hence, is rejected along for the same reason.

Claim 9:

This claim recites similar subject matters as claim 2 in form of system means, hence, is rejected along for the same reason.

Claim 11:

This claim recites similar subject matters as claim 4 in form of system means, hence, is rejected along for the same reason.

Claim 12:

This claim recites similar subject matters as claim 5 in form of system means, hence, is rejected along for the same reason.

Claim 13:

This claim recites similar subject matters as claim 6 in form of system means, hence, is rejected along for the same reason.

Claim 14:

This claim recites similar subject matters as claim 1 in form of computer readable program storage medium, hence, is rejected along for the same reason.

Claim 15:

This claim recites similar subject matters as claim 2 in form of computer readable program storage medium, hence, is rejected along for the same reason.

Claim 17:

This claim recites similar subject matters as claim 4 in form of computer readable program storage medium, hence, is rejected along for the same reason.

Claim 18:

This claim recites similar subject matters as claim 5 in form of computer readable program storage medium, hence, is rejected along for the same reason.

Claim 19:

This claim recites similar subject matters as claim 6 in form of computer readable program storage medium, hence, is rejected along for the same reason.

Claim Rejections - 35 USC § 103 (continue)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 10 and 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Publication No. 2004/0123,180 issued to Soejima and U.S. Publication No. 2004/0088379 issued to Aoshima as applied to claims 2, 8 and 15 and further in view of U.S. Patent No. 5,065,347 issued to Pajak et al. (hereinafter referred as Pajak).

Claim 3:

Except the limitations recited in claim 2, the combined system of Soejima and Aoshima did not specifically disclose that graphical depictions are hierarchical trees.

However, Pajak disclose that graphical depictions are hierarchical trees [e.g., Abstract, col. 2, lines 63 – col. 3, lines 33].

Soejima, Aoshima and Pajak are all in the same field of endeavor to facilitate the data copying processing via geographical depictions, thus, it would have been obvious for an ordinary skilled person in the art at the time the invention was made to apply the well-known technique as taught by Pajak into Soejima's invention, because by doing so, as indicated by Pajak, the combined invention would be upgraded to provide working hierarchical tools to create, modify and access information for document creation and publications as well as support for structured analysis and design methods in a visually pleasing and easily accessible manner [e.g., Pajak: col. 2, lines 41-60].

Claim 10:

This claim recites similar subject matters as claim 3 in form of system means, hence, is rejected along for the same reason.

Claim 16:

This claim recites similar subject matters as claim 3 in form of computer readable program storage medium, hence, is rejected along for the same reason.

Allowable Subject Matter

Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

This claim recites similar subject matters as claim 3 in form of system means, hence, is rejected along for the same reason.

Claim 16:

This claim recites similar subject matters as claim 3 in form of computer readable program storage medium, hence, is rejected along for the same reason.

Allowable Subject Matter

Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claim 20 is allowable because the prior art on record or that encountered in searching for the invention, fails to disclose or suggest the features of instant invention - - a graphic user interface for copying data from one source volume to another target volume, wherein the interface including a confirmation panel that allows an user to select multiple pairs of source and target volumes and swapping the target volume in one pair with the target volume in another pair within the confirmation panel for enhancing the data copying operation in a combination as claimed by applicant.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Y. Chen whose telephone number is 571-272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Y. Chen whose telephone number is 571-272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan Y Chen
Examiner
Art Unit 2161

October 10, 2006

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan Y Chen
Examiner
Art Unit 2161

October 10, 2006

*Susan Y Chen
Primary Examiner
TC 2161
10/10/06*